

# PATENT COOPERATION TREATY

# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 29953-213715	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2005/011599	International filing date (day/month/year) 07/04/2005	(Earliest) Priority Date (day/month/year) 08/04/2004
Applicant GRAHAM PACKAGING PET TECHNOLOGIES INC.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 7 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☒ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 3

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☒ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2005/011599

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2005/011599

## Box No. IV Text of the abstract (Continuation of Item 5 of the first sheet)

A method and apparatus for compression molding plastic articles include a plurality of tools mounted in opposed pairs (14) with the tools of each pair including opposed first (16) and second (20) actuators that define a mold cavity in which a charge of plastic is compression molded. The tooling is preferably carried by a rotary turret (12) so that first (16) and second (20) actuators of each tooling pair are moveable relative to each other between an open position permitting formed articles to be removed from the tooling and to receive fresh charges of plastic, and a closed position to compression mold the charges of plastic.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-15,69-72

Actuators, rail, block  
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2. claims: 16-27,81-84

Mold section comprising at least two sections  
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3. claims: 28-31,90-93

Safety device  
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4. claims: 32-40

Biasing means  
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5. claims: 41-47

Cooling of a core  
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6. claims: 48-58,85-89

Locking means  
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7. claims: 59-68

Several cavities  
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8. claims: 73-80

Sleeve means  
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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2005/011599

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC 7 B29C43/08 B29C43/42  
 //B29C43/50

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B29C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 280 190 A (KRUPP CORPOPLAST MASCHINENBAU GMBH) 31 August 1988 (1988-08-31)	1-15, 69-72
A	column 6, line 6 - column 9, line 52; figures	59-68
X	US 6 416 312 B1 (GONSER HEINZ O ET AL) 9 July 2002 (2002-07-09)	16-27, 81-84
A	column 4, line 1 - column 7, line 24; figures	41-47
X	FR 1 324 471 A (MAGERLE KARL) 19 April 1963 (1963-04-19)	16-27, 81-84
	page 2, right-hand column, paragraph 3 - left-hand column, paragraph 2; figures	
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## ° Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*G\* document member of the same patent family

Date of the actual completion of the international search

3 November 2005

Date of mailing of the international search report

14.11.2005

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## INTERNATIONAL SEARCH REPORT

International Application No

PCT/US2005/011599

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1 273 417 A (OWENS-ILLINOIS CLOSURE) 8 January 2003 (2003-01-08)	1, 28-31, 69
X	column 4, line 23 - column 5, line 16 column 6, line 35 - column 7, line 54; figures 1-5, 2A	90-93
A	column 6, line 35 - column 7, line 11	48-58, 85-89
A	----- US 5 670 100 A (OWENS-ILLINOIS CLOSURE) 23 September 1997 (1997-09-23) column 3, line 49 - column 5, line 15; figures 2-6, 8-10	1, 69
X	column 8, line 27 - line 57; figures	32-40, 73-80
A	----- US 5 225 132 A (FARINA ET AL) 6 July 1993 (1993-07-06) column 3, line 20 - column 4, line 54; figures	1
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2005/011599

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0280190	A	31-08-1988	DE 3705946 A1	08-09-1988
			JP 63233808 A	29-09-1988
			US 4773843 A	27-09-1988
US 6416312	B1	09-07-2002	NONE	
FR 1324471	A	19-04-1963	NONE	
EP 1273417	A	08-01-2003	NONE	
US 5670100	A	23-09-1997	AT 176421 T	15-02-1999
			AU 685839 B2	29-01-1998
			AU 7572594 A	04-05-1995
			BR 9404106 A	13-06-1995
			CA 2123391 A1	15-04-1995
			DE 69416378 D1	18-03-1999
			DE 69416378 T2	30-09-1999
			DK 654335 T3	16-08-1999
			EP 0654335 A1	24-05-1995
			ES 2130324 T3	01-07-1999
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			JP 7214580 A	15-08-1995
			US 5554327 A	10-09-1996
			US 5770130 A	23-06-1998
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